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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,304	02/18/2004	Rolf Pfeifer	3926.067	4836
30448	7590	01/16/2007		
AKERMAN SENTERFITT P.O. BOX 3188 WEST PALM BEACH, FL 33402-3188			EXAMINER FERGUSON, LAWRENCE D	
			ART UNIT	PAPER NUMBER
			1774	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/16/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/781,304

Applicant(s)

PFEIFER ET AL.

Examiner

Lawrence D. Ferguson

Art Unit

1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 21-40 is/are pending in the application.
- 4a) Of the above claim(s) 33-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 9/27/04.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

***Response to Election***

1. This action is in response to the provisional election mailed October 24, 2006. (Group I) Claims 21-32 were provisionally elected rendering (Group II) Claims 33-38 and (Group III) Claims 39-40 to non-elected inventions.

***RESPONSE TO REQUEST FOR RECONSIDERATION***

2. Applicant's election with traverse of (Groups II and III) is acknowledged. The traversal is on the ground(s) that 'all of the groups are interrelated and should be examined together.' The search of the 3 classes and subclasses would entail the requisite serious burden as the search for method of making is not the same as the article search. Additionally, the steps used in the method claims would not be expected to appear in the class/subclass of the product claims. Every three dimensional body and/or device is not made using the same method steps. Applicant argues it is unclear how a layer of powder particles can be made by means of a stamping device. A stamper can have particles on its lower surface and as the stamper comes in contact with a substrate, some of the particles are applied (dispersed) on the substrate. Additionally, extruding the substrate prior to applying the powder particles is a different process than what is recited in claim 21.

The requirement is deemed proper and is therefore made **FINAL**.

***Claim Rejections – 35 USC § 103(a)***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 21-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jang et al. (U.S. 5,936,861).

Jang discloses a process for layer by layer production of a three dimensional body (column 3, lines 25-33) having a dispensing device (column 4, lines 37-47) to dispense particles, where the material solidifies shortly after being dispensed (column 5, lines 35-37). The powder particles are ionized (column 10, lines 55-57) and Jang discloses a polymeric binder (adhesive) present on the powder particles, where the binder is soluble in a liquid medium such as water (column 10, lines 25-27 and column 11, lines 1-5). The reference discloses the three dimensional body has layers formed on the bottom surface and the layers are smoothed (brushed) with a blade (column 12, lines 15-32) where the layering steps are repeated (column 16, lines 26-36).

Jang teaches laser sintering to fuse the material, which is then expected to resolidify (column 1, lines 37-42). In claim 21, the phrase, "to adhere powder particles to each other within the layer" constitutes an intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from

the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Because Jang is silent of having powder particle agglomerates, it would be expected for the deposition layer to be essentially free of powder agglomerates prior to flattening. The dispensing device can control the sequentially formed layers to have a desired thickness (column 4, lines 48-49). Although Jang does not specifically disclose the thickness of one of the layers or amount of binder applied to the particles, thickness and binder depth are optimizable features. It would have been obvious to one of ordinary skill in the art to optimize the deposited layer(s) and binder because discovering the optimum or workable range involves only routine skill in the art. The thickness and binder depth directly affect the flexibility of the layered material. *In re Aller* 105 USPQ 233 and see *In re Boesch*, 617 USPQ 215.

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is 571-272-1522. The examiner can normally be reached on Monday through Friday 9:00 AM – 5:30PM.

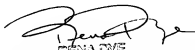
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye, can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



L. Ferguson  
Patent Examiner  
AU 1774



RENA DYE  
SUPERVISOR PATENT EXAMINER

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